

REMARKS/ARGUMENTS

Claims 1-21 are pending in this application.

Claims 1 and 12-14 have been amended.

Claims 1-6, 8-18, 20, and 21 had been rejected under 35 U.S.C. § 102(b) over Schulze (US Patent No. 4,561,947). Claims 7 and 19 had been rejected under 35 U.S.C. § 103(a) over Schulze. These rejections are respectfully traversed for the following reasons.

... [I]n order to demonstrate anticipation, the proponent must show that the four corners of a single, prior art document describe every element of the claimed invention. . . . [T]he prior art reference—in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements arranged as in the claim.

The meaning of the expression “arranged as in the claim” is readily understood in relation to claims drawn to things such as ingredients mixed in some claimed order. In such instances, a reference that discloses all of the claimed ingredients, but not in the order claimed, would not anticipate, because the reference would be missing any disclosure of the limitations of the claimed invention “arranged as in the claim.” But the “arranged as in the claim” requirement is not limited to such a narrow set of “order of limitations” claims. Rather, our precedent informs that the “arranged as in the claim” requirement applies to all claims and refers to the need for an anticipatory reference to show all of the limitations of the claims arranged or combined in the same way as recited in the claims, not merely in a particular order. The test is thus more accurately understood to mean “arranged or combined in the same way as in the claim.”

For example, in *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452 (Fed. Cir. 1984), reviewed a district court’s determination that a patent directed to a hydraulic scrap shearing machine was anticipated by a prior patent directed to a method for shearing spent nuclear fuel bundles. Because the district court had treated the claims as mere catalogs of separate parts, in disregard of the part-to-part relationships set forth in the claims

and that give the claims their meaning, we reversed. Although the prior art reference could be said to contain all of the elements of the claimed invention, it did not anticipate under 35 U.S.C. § 102 because it disclosed an entirely different device, composed of parts distinct from those of the claimed invention, and operating in a different way to process different material differently. The reference thus was deficient because it did not disclose the elements of the claimed invention “arranged as in the claim” as required by 35 U.S.C. § 102.

. . . .

. . . [U]nless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102.

Net MoneyIN v. Verisign, No. 2007-1565, slip. op. at 15-18 (Fed. Cir. Oct. 20, 2008) (citations and quotation marks omitted).

Schulze depends on presence of thiourea as a complexing agent, which is a critical element of the Schulze method. “The process of the [Schulze’s] invention depends upon the surprising recognition that the leaching of noble metal-containing ores with thiourea is carried out in the simultaneous presence of an oxidation agent and of a reduction agent.” Schulze, col. 2, lines 33-37.

Claims 1-21 as amended is directed to the method which uses no thiourea at all and no combination of thiourea with any agent, but is only performed in an environment where complexing agents come from a group consisting of the ore, the oxygen-containing oxidant, the solvent, the reducing agent, and products of their reactions. The present amendment excludes from the claimed invention complexing agents other than those recited in the Claims 1-21. Since thiourea does not belong to the group of complexing agents in Claims 1-21, it cannot be said that Schulze discloses each and every element of the invention claimed in Claims 1-21 arranged as in the Claims.

Furthermore, contrary to the 35 U.S.C. § 102(b) requirements stated hereinabove, Schulze does not teach “the part-to-part relationships set forth in the claims and that give the claims their meaning.” The reducing agent and oxidants in Claims 1-21 are used without thiourea to recover the metals from ores, while in Schulze their “simultaneous presence” with thiourea is needed only to reduce thiourea’s consumption in the course of metal recovery by thiourea and to reduce the time and increase the yield of this thiourea metal recovery:

“Surprisingly, we have now found that, with the help of thiourea, it is possible, when maintaining certain reaction conditions, to recover noble metals from their ores in relatively short leaching times and in high yield.” Schulze, col. 1, lines 65-68.

“Thus, according to the present invention, there is provided a process for the hydrometallurgical recovery of noble metals from materials containing them by treatment with thiourea in an aqueous, acidic medium in the presence of an oxidation agent, wherein the aqueous medium simultaneously contains an oxidation agent and a reduction agent.” Schulze, col. 2, lines 1-7.

“Due to the high concentrations of thiourea and oxidation agent, there is achieved, without additional expenditure for apparatus, a considerable shortening of the leaching procedure and thus a considerable reduction of the investment costs.” Schulze, col. 2, lines 15-20.

“This combination of thiourea, ferric salt and sulphur dioxide makes it possible, in the case of a considerably shorter leaching time, to obtain a substantially higher yield of noble metal and, in addition, also to make available to the noble metal recovery raw materials which cannot be digested with cyanides.” Schulze, col. 2, lines 58-64.

To say it differently, as can be seen from the cited portions of Scultze, the method in Schulze will never work (is inoperable) without the present of thiourea as a complexing agent, therefore, a Claim that recites a method that specifically excludes thiourea from that method cannot be anticipated by the Schulze patent.

Therefore, Claims 1-21 are patentable, novel, and non-obvious over Schulze under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) and should be allowed.

It is believed that the present application is in condition for allowance. A Notice of Allowance is respectfully solicited in this case. Should any questions arise, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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Date: November 10, 2008